

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) An apparatus for coupling a peripheral device to a host comprising:

an interface circuit configured to receive a request from said host and present a response to said request to said host; and

5 a ~~logic circuit~~ serial interface engine (SIE) coupled to said interface circuit and configured to (i) automatically generate said response to said request when said request is ~~serviceable by said logic circuit~~ a first type of request that said serial interface engine is configured to recognize and (ii) pass (a) said request from said interface circuit to an external circuit and (b) said response to said request from said external circuit to said interface circuit when said request is ~~not serviceable by said logic circuit~~ a second type of request that said serial interface engine is not configured to recognize.

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2. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said interface circuit ~~and said logic circuit are part of~~ comprises a serial interface ~~engine (SIE)~~.

3. (ORIGINAL) The apparatus according to claim 1, wherein said external circuit comprises a processor.

4. (ORIGINAL) The apparatus according to claim 3,
wherein said external circuit comprises a processor selected from
the group consisting of a digital signal processor (DSP), a
microprocessor, and an application specific integrated circuit
5 (ASIC).

5. (ORIGINAL) The apparatus according to claim 1,
wherein said apparatus comprises a universal serial bus (USB)
peripheral device.

6. (CURRENTLY AMENDED) The apparatus according to claim
1, wherein said ~~logic circuit~~ serial interface engine is configured
to generate said response to said first type of request using
information received from said external circuit.

7. (CURRENTLY AMENDED) The apparatus according to claim
6, wherein said serial interface engine further comprising
comprises a memory configured to store said information, ~~wherein~~
and said information comprises a descriptor table.

8. (CURRENTLY AMENDED) The apparatus according to claim
1, wherein said ~~logic circuit~~ serial interface engine is further
configured to (i) automatically service an enumeration request,
(ii) to handle physical layer requirements, (iii) to handle a

5 packet protocol layer, and (iv) to maintain one or more endpoints.

9. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said serial interface engine is further configured to handle USB chapter 9 protocol communications transparently to said external circuit and said first type of request comprises a request as defined in Chapter 9 of the Universal Serial Bus (USB) Specification, revision 2.0.

10. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~logic circuit is configured to pass to said external circuit~~ second type of request comprises a request selected from the group consisting of a class request, a vendor request, a custom driver request, and requests implemented to support USB specification changes and enhancements.

11. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said external circuit is configured to generate a stall signal as said response when said request of said second type is not recognized by said external circuit.

12. (CURRENTLY AMENDED) An apparatus comprising:
means for receiving a request from a host and presenting a response to said request to said host; and

means for generating said response automatically when
5 said request is ~~serviceable~~ of a first type recognized by said
generating means; and

means for passing (i) said request from said receiving
and presenting means to an external circuit and (ii) said response
from said external circuit to said receiving and presenting means
10 when said request is ~~not serviceable~~ of a second type not
recognized by said generating means.

13. (CURRENTLY AMENDED) A method for interfacing a
peripheral device to a host comprising the steps of:

receiving a request from said host;

5 automatically responding to said request within a serial
interface engine when said request is ~~recognized~~ a first type of
request that said serial interface engine is configured to
recognize;

when said request is a second type of request that said
serial interface engine is not recognized configured to recognize,
10 passing said request to an external circuit;

receiving a response to said request from said external
circuit when said request is of said second type; and

passing on said response to said host.

14. (PREVIOUSLY PRESENTED) The method according to claim 13, further comprising the step of:

generating said response as a stall command when said request is not recognized by said external circuit.

15. (ORIGINAL) The method according to claim 13, wherein said external circuit comprises a processor selected from the group consisting of a digital signal processor (DSP), a microprocessor, and an application specific integrated circuit (ASIC).

16. (ORIGINAL) The method according to claim 13, wherein said requests are received via a serial bus in accordance with the Universal Serial Bus (USB) Specification, revision 1.0, 1.1, or 2.0.

17. (CURRENTLY AMENDED) The method according to claim 13, wherein said first type of request comprises an enumeration request.

18. (CURRENTLY AMENDED) The method according to claim 13, wherein said second type of request presented to said external circuit comprises a request selected from the group consisting of a class request, a vendor request, a custom driver request, and a

5 request implemented to support changes and/or enhancements to a communication protocol.

19. (PREVIOUSLY PRESENTED) The method according to claim 17, wherein the step of automatically responding to said request comprises enumerating said peripheral device without passing said enumeration request to said external circuit.

20. (ORIGINAL) The method according to claim 13, further comprising the step of receiving one or more descriptor tables from said external circuit.